



Aeronautics MATH Resources

Flight Control Math

Links for all the Flight Control Math Lessons can be found at:

<https://www.nasa.gov/aeroresearch/stem/AAM>

This series of lessons use advanced air mobility (AAM) to have students complete a series of math exercises.

- Flight Control Math 1 (Graphing)
- Flight Control Math 2 (Using the Distance Formula)
- Flight Control Math 3 (Using the Distance and Speed Formulas)
- Flight Control Math 4 (Using the Pythagorean Theorem)
- Flight Control Math 5 (Finding the Equation of a Line and the Point of Intersection for Two Lines)

Sonic Boom Flight Recommendations

Educator Guide:

<https://www.nasa.gov/sites/default/files/atoms/files/x-59-performance-assessmen-educator.pdf>

Student's Guide:

<https://www.nasa.gov/sites/default/files/atoms/files/supersonic-flight-recommendations.pdf>

Data File:

https://www.nasa.gov/sites/default/files/atoms/files/supersonic_aircraft_data_file.xlsx

Students use authentic data to determine how airplanes react at different speeds.

Mystery Picture Graphing Activities

https://www.nasa.gov/sites/default/files/atoms/files/seeing_sound_k-8-v2_0.pdf

Reveal the mystery aircraft by plotting points on an x-y graph and then connecting the dots.

Noise – Speed of Sound

https://www.nasa.gov/sites/default/files/atoms/files/speed_of_sound_9-12.pdf

This activity, which is designed for high schoolers, allows students to collect data and calculate the speed of sound.

Smart Skies – LineUp With Math

<https://smartskies.nasa.gov/lineup/index.html>

Problem sets and hands-on math activities teach students about distance, rate, and time through the lens of air traffic control.

Living in the Age of Airplanes Educator Guide

<https://www.nasa.gov/sites/default/files/files/Living-in-the-age-of-airplanes-resource-guide.pdf>

To accompany the documentary Living in the Age of Airplanes, four algebra and geometry activities use flight paths, flying and walking speed, and air traffic control to engage students in real-world math problems.

DID YOU KNOW?

AAM



The vision of AAM is that of a safe, accessible, automated, and affordable air transportation system for people and cargo capable of serving previously hard-to-reach urban and rural locations, using revolutionary new aircraft only now becoming possible.